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(56) Documents Cited

None

(58) Field of Search

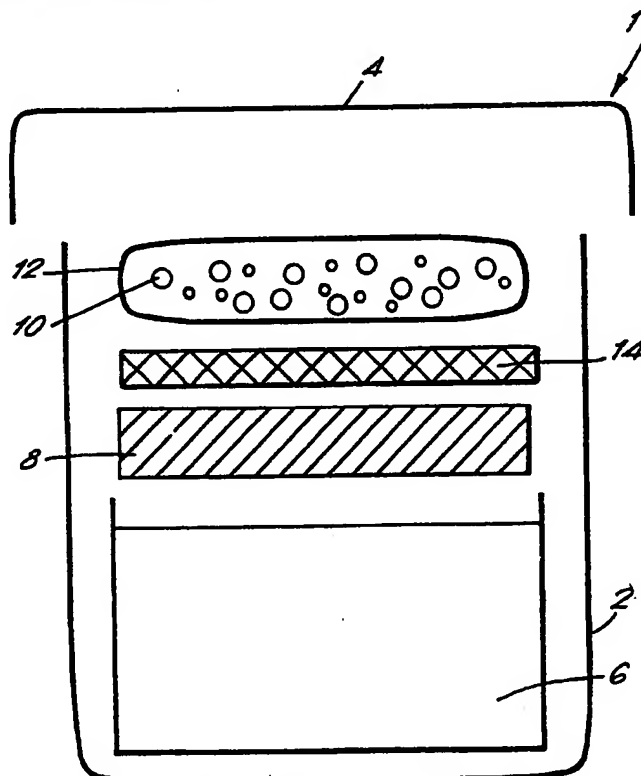
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(54) Containers for food stuff

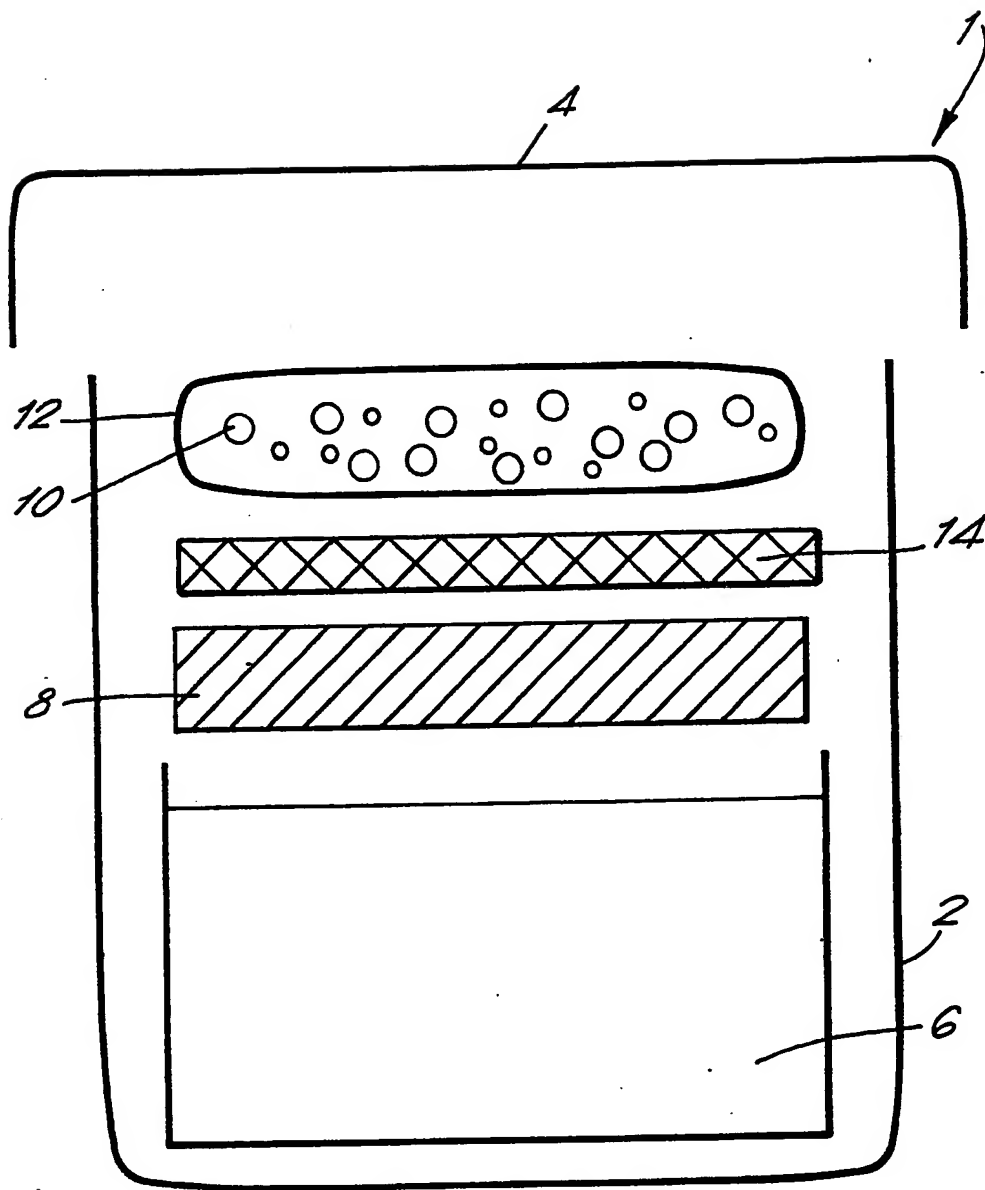
(57) A container (1) for chilling food stuff (6) comprises a block of solid carbon dioxide (8) located adjacent to the foodstuff (6) and a material (10) such as sodalime for absorbing gaseous carbon dioxide. The absorbing material may be contained within a semi-permeable membrane. A heat insulating mat (14) may be located between the block of solid carbon dioxide and the absorbing material. In use of the container for cooling purposes, carbon dioxide gas is retained in the container, making the use of solid carbon dioxide safe in an environment where human beings are present.



At least one drawing originally filed was informal and the print reproduced here is taken from a later filed formal copy.

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CONTAINERS FOR FOOD STUFF

The present invention relates to containers for food stuff and in particular containers for chilling food stuff.

There is a growing tendency in the food industry for food to be prepared and chilled for a short time before consumption. It is usual to prepare and chill, for example, sandwiches at a temperature between 0 and 5°C before serving them.

It is known to achieve the chilling effect by placing one or more blocks of solid carbon dioxide (carbon dioxide snow) onto packs of sandwiches. The solid carbon dioxide sublimates and thus chills the packs of sandwiches until all the carbon dioxide has evaporated.

However, carbon dioxide levels in the atmosphere even as low as 1.5% by volume are now regarded as unacceptable for lengthy periods of time where human beings are concerned.

It is an aim of the present invention to provide a container which includes a material for removing excess carbon dioxide gas from the immediate atmosphere within the container thereby making the use of solid carbon dioxide safer, that is, so that it can be used in close proximity to human beings without undue concern.

According to the present invention in a container for chilling food stuff there is provided a block of solid carbon dioxide located adjacent the food stuff and a material for absorbing gaseous carbon dioxide.

Preferably the absorbing material is sodalime contained within a semi-permeable membrane.

In a preferred embodiment a heat insulating mat is located between the block of solid carbon dioxide and the absorbing material.

An embodiment of the invention will now be described, by way of example, reference being made to the Figure of the accompanying diagrammatic drawing which is a schematic side view of a container for chilling food stuff.

As shown, the container 1 for chilling food stuff comprises of body part 2 and a lid 4. Located within the body part 2 is a compartment 6 for the food stuff, for example, packs of sandwiches to be chilled. Immediately above (as shown) the compartment 6 there is located a block 8 of solid carbon dioxide. Spaced from the block 8 of solid carbon dioxide and located adjacent the upper (as shown) end of the body part 2 is the material for absorbing gaseous carbon dioxide in the form of sodalime 10 contained within a semi-permeable membrane 12.

Located between the block 8 of solid carbon dioxide and the semi-permeable membrane 12 is a heat insulating mat 14.

In use, the solid carbon dioxide sublimates and thereby keeps the packs of sandwiches in the compartment 6 chilled to a temperature between, for example, 0 and 5°C. Gaseous carbon dioxide passes up the body part 2 and is absorbed by the sodalime 10. The absorption process is exothermic and the insulating mat 14 serves the function of keeping the heat generated by the exothermic reaction away from the packs of sandwiches within the compartment 6.

It is anticipated that the sodalime 10 within the semi-permeable membrane 12 will be so dimensioned as to combine with approximately 3/4 by volume of the evolved carbon dioxide from the block 8 of solid carbon dioxide.

It is anticipated that the sodalime within the semi-permeable membrane will be treated as a disposable item.

The advantage of the embodiment described above is that the carbon dioxide gas is retained within the container 1 which thus renders the use of solid carbon dioxide cooling relatively safe in an environment where human beings are present.

CLAIMS

1. In a container for chilling food stuff, a block of solid carbon dioxide located adjacent to the food stuff and a material for absorbing gaseous carbon dioxide.
2. A container as claimed in claim 1, in which the absorbing material is sodalime contained within a semi-permeable membrane.
3. A container as claimed in claim 1 or 2, in which a heat insulating mat is located between the block of solid carbon dioxide and the absorbing material.
4. A container as claimed in any one of claims 1 to 3, in which a compartment is located adjacent the bottom of the container for holding the food stuff, the block of solid carbon dioxide being located immediately above the compartment.
5. A container for chilling food stuff constructed and arranged substantially as herein before described with reference to the Figure of the accompanying drawing.

Patents Act 1977
Examiner's report to the Comptroller under
Section 17 (The Search Report)

- 4 -

Application number

GB 9221906.2

Relevant Technical fields

(i) UK CI (Edition K) F4H

(ii) Int CI (Edition 5) F25D

Databases (see over)

(i) UK Patent Office

(ii) ONLINE DATABASE: WPI

Search Examiner

M C MONK

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24 NOVEMBER 1992

Documents considered relevant following a search in respect of claims ALL

Category (see over)	Identity of document and relevant passages	Relevant to claim(s)
	NONE	1-5

Category	Identity of document and relevant passages - 5 -	Relevant to claim'

Categories of documents

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P: Document published on or after the declared priority date but before the filing date of the present application.

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